

Appl. No. : 10/005,751
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AMENDMENTS TO THE CLAIMS

1. (Currently amended) A microprocessor controlled device having an upper leaf and a lower leaf,
said upper leaf having a display screen configured to accept user input through the application of a force applied to the surface of the screen,
said upper leaf mounted on said lower leaf with the screen oriented at a comfortable viewing angle for a user when the lower leaf is in a generally horizontal orientation,
said lower leaf having a front and rear edge,
said upper leaf positioned inwardly from the front edge of said lower leaf such that a significant portion of said lower leaf forward of said upper leaf is directly accessible by a user,
said upper leaf positioned such that the maximum force typically applied to the uppermost force sensitive portion of the display screen in ordinary use is less than that needed to cause the microprocessor controlled device to tip backwards while positioned on a generally horizontal surface, but would cause such tipping if the same upper leaf were mounted at the rear edge of the same lower leaf with the screen at the same comfortable viewing angle.
2. (Previously amended) The microprocessor controlled device of claim 1, wherein the force is less than that needed to cause tipping because the length of the moment arm, defined by the length of the distance from the point of application of the turning force to the rotational axis, is less than the length of the moment arm would be if the display were hinged to the lower leaf at a fixed point at the rear of the lower leaf in a conventional clam shell arrangement.
3. (Previously amended) The microprocessor controlled device of claim 2, wherein the force is less than that needed to cause tipping because the length of the moment arm is reduced by using a hinge that will cause the display, when fully opened, to be displaced forward from, but substantially parallel to, an ordinary, open position it would be in if the upper leaf were hinged to the lower leaf at a fixed point at the rear of the lower leaf.

4. (Previously amended) The microprocessor controlled device of claim 3, wherein the force is less than that needed to cause tipping for the further reason that the center of gravity of the device has been displaced forward, thereby increasing the magnitude of the torque resisting backwards tipping.

5. (Previously amended) The microprocessor controlled device of claim 2, wherein the length of the moment arm is reduced by using a hinge that will cause the display, when fully opened, to be displaced downwards from, but substantially parallel to, an ordinary, open position it could be in if the upper leaf were hinged to the lower leaf at a fixed point at the rear of the lower leaf.

6. (Previously amended) The microprocessor controlled device of claim 2, wherein the length of the moment arm is reduced by extending the rear of the lower leaf.

7. (Currently amended) The microprocessor controlled device of claim 6, wherein the extension is achieved using rearward feet legs which are permanent.

8. (Currently amended) The microprocessor controlled device of claim 6, wherein the extension is achieved using rearward feet legs which extend back as the display opens up.

9. (Currently amended) The microprocessor controlled device of claim 6, wherein the extension is achieved using rearward feet legs which are manually extendible.

10. (Previously amended) The microprocessor controlled device of claim 1, wherein the display has pen and touch sensitive buttons, regions, or drop-down menu items which are positioned at or near the top most part of the display.

11. (Previously amended) The microprocessor controlled device of claim 1, further comprising a keyboard coupled to the lower leaf which extends forward as the display is raised and which tilts slightly towards the user during its extension.

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12. (Previously amended) The microprocessor controlled device of claim 11, wherein the force typically applied to the part of the keyboard closest to the user is less than that needed to cause the computer to tip forward, in relation to a rotational axis about which the device would rotate if it were to tip forwards.

13. (Previously amended) The microprocessor controlled device of claim 1, wherein the device is of a size to be classified as a palmtop computer.

14. (Previously amended) The microprocessor controlled device of claim 1, wherein the device is of a size to be classified as a sub-notebook computer.

15. (Previously amended) The microprocessor controlled device of claim 1, wherein the device is of a size to be classified as a notebook computer.

16. (Previously amended) The microprocessor controlled device of claim 1, further comprising a keyboard coupled to the lower leaf, in which a casing for the display has similar dimensions in plan to the keyboard so that in the closed position the casing for the display substantially covers the keyboard.

17. (Previously amended) The microprocessor controlled device of claim 1, further comprising a lower leaf base and an upper leaf casing for the display in which the rear of the fully opened casing rests directly upon a part of the base.

18. (Currently amended) A microprocessor controlled device comprising:
an upper leaf and a lower leaf;
said upper leaf having a display screen configured to accept user input through the application of a force applied to the surface of the screen said display having a bottom portion;

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said upper leaf mounted on said lower leaf with the screen oriented at a comfortable viewing angle for a user when the lower leaf is in a generally horizontal orientation;

said lower leaf having a front and rear edge;

said upper leaf positioned inwardly from the front edge of said lower leaf such that a significant portion of said lower leaf forward of said upper leaf is directly accessible by a user;

said upper leaf positioned such that the maximum force typically applied to the uppermost force sensitive portion of the display screen in ordinary use is less than that needed to cause the microprocessor controlled device to tip backwards while positioned on a generally horizontal surface, but would cause such tipping if the same upper leaf were mounted at the rear edge of the same lower leaf with the screen at the same comfortable viewing angle; and,

a hinge coupling said upper leaf and said lower leaf that allows the ~~base~~ bottom portion of the display to move forwards during either opening or closing of the device.

19. (Previously amended) The microprocessor controlled device of claim 18, wherein the display has pen and touch sensitive buttons, regions, or drop-down menu items which are positioned at or near the top most part of the display.

20. (Currently amended) The microprocessor controlled device of claim 18, further comprising a lower leaf base and an upper leaf casing for the display in which the rear of the fully opened casing rests directly upon a part of the lower leaf base.

21. (Previously amended) A microprocessor controlled device comprising:
a base having a front edge and a back edge;
a pressure sensitive screen having a top and a bottom,
said screen mounted to said base;
said screen, when in a viewing position, at an angle which is tilted with respect to the base;

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and wherein at least a portion of the screen, when in a viewing position, is positioned inward from a rotational axis of the base, such that a first equivalent torque of the portion of the screen positioned inward from a rotational axis of the base combined with a second equivalent torque of the base is at least 30 percent greater than a third equivalent torque of the portion of the screen positioned outward of the back edge of the base combined with a fourth equivalent torque from a typical force applied perpendicular to the screen at a top most touch sensitive portion of the screen,

thereby preventing the screen and base from tipping over when the base is on a flat surface and the base is not permitted to slide rearwardly, and

wherein any force of more than 220 percent of the typical force applied perpendicular to the screen at a top most touch sensitive portion of the screen causes the screen and base to tip.

22. (Original) The microprocessor controlled device of claim 21, wherein the typical force is approximately 80 g-forces.

23. (Original) The microprocessor controlled device of claim 21, wherein the device is a palmtop computer.

24. (Original) The microprocessor controlled device of claim 21, wherein the device is a sub-notebook computer.

25. (Previously amended) A microprocessor controlled device comprising:
a base having a front edge and a back edge, said base having a first weight;
a force sensitive screen having a top and a bottom, said screen mounted when in a viewing position to said base at an angle which is tilted with respect to the base, the screen having a second weight being no less than 33 percent of the first weight;
and wherein the bottom of the screen is positioned between the front edge and the back edge of the base, and said screen further positioned such that when any force of up to 220 percent of a typical force is applied perpendicular to the screen at a top most touch

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sensitive portion of the screen the base and the screen do not tip over when the base is on a flat surface and the base is not permitted to slide rearwardly.

26. (Original) The microprocessor controlled device of claim 25, wherein the typical force is approximately 80 g-forces.

27. (Original) The microprocessor controlled device of claim 25, wherein the first weight is approximately 245 grams.

28. (Original) The microprocessor controlled device of claim 25, wherein the second weight is approximately 107 grams.

29. (Original) The microprocessor controlled device of claim 25, wherein the device is a palmtop computer.

30. (Previously amended) A microprocessor controlled device comprising:
a base;
a force sensitive screen having a length and width defining a screen area, said screen mounted when in a viewing position to said base at an angle which is tilted with respect to the base;
said screen mounted to the base so that at least 30 percent but not more than 80 percent of the screen area is positioned directly above the base; and said screen positioned such that when any force of up to 220 percent of a typical force is applied perpendicular to the screen at a top most pressure sensitive portion of the screen, the screen and base do not tip over when the base is on a flat surface and the base is not permitted to slide rearwardly.

31. (Original) The microprocessor controlled device of claim 30, wherein the typical force is approximately 80 g-forces.

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32. (Original) The microprocessor controlled device of claim 30, wherein the device pivots about feet mounted to the base.

33. (Original) The microprocessor controlled device of claim 30, wherein the device is a palmtop computer.

34. (Original) The microprocessor controlled device of claim 30, wherein the device is a notebook computer.

35. (Currently amended) A microprocessor controlled device comprising:

a base having a length and a width, said base adapted to rest on a horizontal flat surface;

a force sensitive screen mounted to said base at an angle which is tilted with respect to said base to permit easy viewing of the screen and in a position appropriate to permit user input through the application of a force applied to the screen; and

said screen being positioned with respect to the base such that a line perpendicular to the screen and passing through the top most force sensitive portion of the screen also passes does not pass through the base and such that the microprocessor controlled device does not tip backwards when the maximum force ordinarily applied to the screen is applied to the top most force sensitive portion of the screen.

36. (Original) The microprocessor controlled device of claim 35, wherein the angle is in a range of 21 degrees to 31 degrees.

37. (Original) The microprocessor controlled device of claim 35, wherein the angle is 26 degrees.

38. (Currently amended) A method of positioning a force sensitive display with respect to a microprocessor controlled device to prevent tipping, the method comprising the acts of:

providing a base having a front edge and a back edge;

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providing a display having a top and bottom, said display coupled to said base; orienting the display at an angle to the base to provide for viewing, wherein the bottom of the display is positioned between inwardly from the front edge and the back edge of the base such that a significant portion of the base is positioned forward of said upper leaf leaving a significant portion of the area above the base freely accessible by a user without interference from the display and said display further positioned such that a torque typically applied to the top most force sensitive part of the display is less than that needed to cause the computer microprocessor controlled device to tip about a rotational axis, but said torque would be sufficient to cause tipping if the display were hinged to the base in a conventional clam shell arrangement at the back edge of the base.

39. (Currently amended) A method of designing a microprocessor controlled device with a touch sensitive or pen sensitive display, comprising the steps of:

providing a base having at least one a front edge;
providing a display having a top and bottom, said display coupled to said base;
arranging the position of the fully opened display such that display is positioned inwardly from the front edge of said base such that a significant portion of said base forward of said display is directly accessible by a user and such that the maximum torque typically applied to the top most force sensitive part of the display, in relation to a rotational axis about which the device would rotate if it were to tip backwards, is less than that needed to cause the computer to tip backwards about that rotational axis, but, if the display were hinged to the base in a conventional clam shell arrangement at the rear of the device, said torque would be sufficient either to cause such tipping or to cause the display to be rotated away from a normal viewing position.

40. (Previously amended) The method of claim 39, wherein the device is a palm top computer and the force associated with the torque typically applied to the top most pen or touch sensitive part of the display is 80 g-force.

41. (Previously amended) The method of claim 39, wherein the step of arranging is achieved by using a hinge that will cause the display, when fully opened, to be displaced forward

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from, but substantially parallel to, an ordinary, open position it could be in if the display were hinged to the base at a fixed point at the rear of the device.

42. (Currently amended) The microprocessor controlled device of claim 1, wherein the front of the display screen faces towards the base when the device is closed.

43. (Previously added) The microprocessor controlled device of claim 21, wherein the front of the display screen faces the base when the device is closed.

44. (Previously added) The microprocessor controlled device of claim 39, further including orienting the display towards the base when the device is closed.

45. (Previously added) A microprocessor controlled device comprising:
a base, having a front edge and a back edge;
a pressure sensitive screen, the pressure sensitive screen having a top edge and bottom edge, the pressure sensitive screen coupled to the base; and,
screen adjustment means, said screen adjustment means increasing the distance between the position of the bottom edge of the screen relative to the back edge of the base by sliding the bottom edge along the base towards the front edge in order to stabilize the device upon exercise of pressure upon the pressure sensitive screen.

46. (Cancelled) 